## CLAIMS

We claim:

A system for accessing patient information and data stored electronically, comprising:

at least one receiving station under the control of at least one user of said system;

at least one transmitting station physically separated from said receiving station;

at least one type of network connecting, and transmitting data between, said transmitting station and said receiving station;

means for said system accessing at least one patient data source containing at least one patient volume data set acquired using at least one data acquisition method; and

user interface means provided at said receiving station for enabling said user to specify at least one request of volume data rendering result, said request comprising specification of data rendering parameters of at least one volume data rendering method to be applied on at least one radiological volume data set from said data source.

2. The system of claim I further including:

display means for presenting said rendering result and a plurality of said rendering parameters at said receiving station.

12. The system of claim 1 further including:

security and data management means for preventing an unauthorized user from gaining access to said data set from said system.

The system of claim wherein:

said security and data management means further include means for employing firewalls during the data transmission and / or for encrypting demographic of said data set.

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 $\mu_{\mathcal{S}}$ . The system of claim 1 further including:

Means included in said transmitting station for compressing data to be transmitted;

means for transmitting said compressed data from said transmitting station to said receiving station through said network; and

means included in said receiving station for decompressing said transmitted data.

The system of claim 1 wherein:

said transmitting station includes means for computing at least a part of said rendering result, and said receiving station includes means for computing the remaining part of said rendering result.

7. The system of claim 1 wherein:

said system's software is installed, managed and upgraded at one of said stations, the software for the other station being alternatively supplied at each time of use over said network or on a permanent basis.

8. The system of claim 1 further including:

management and software distribution means included in said system for charging the use of said system alternatively on per license basis or on per use basis.

9. The system of claim 1 wherein:

said system has a plurality of operation modes, the particular operation mode used being alternatively selected by said user through said user interface, or by an automated computer program.

10. The system of claim 1 wherein:

said receiving station is provided with software which is usable with a web browser.

11. The system of claim 1 wherein:

said receiving stations comprises one of multiple receiving stations interconnected by said network so that the input and the display at one of said receiving stations can be viewed by other of said receiving stations.

12. The system of claim 1 further including:

data transmission means for transmitting images with progressive refinement.

13. The system of claim 1 wherein:

said user interface means includes image processing tools and data editing tools for editing said data set.

14. The system of claim 1 wherein:

the data transmission is controlled by the transmission parameters, said transmission parameters being alternatively selected by said user through said user interface, or by an automated program.

5 15. The system of claim 3 wherein:

said compressing means and decompressing means are operable in accordance with each of a plurality of compression / decompression methods, the particular method used being alternatively selected by said user through said user interface, or by an automated computer program.

16. The system of claim 2 wherein:

said user interface means comprises means for enabling said user

to specify different data rendering requests resulting from different rendering parameters, different rendering methods, and / or different data sets from one or multiple data acquisition methods, and

to specify a method to integrate said different data rendering results into at least one composite rendering result; and

said display means for presenting at said receiving station said composite rendering result and a plurality of parameters used for generating said composite rendering result.

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